

WHAT IS CLAIMED IS:

1. An electric steering control device having a motor drive circuit for applying a drive electric current depending on an electric current command value, to an electric motor which supplies a torque to a steering mechanism of a motor vehicle; and a command value generating section for generating said electric current command value in dependence on the driving state of said drive vehicle, said control device comprising:

a temperature sensor for detecting the temperature of a circuit board mounting said motor drive circuit thereon; and

a compensation section provided in said command value generating section for compensating said electric current command value based on the board temperature detected by said temperature sensor.

2. The control device as set forth in Claim 1, wherein said temperature sensor is used for heat control of a spiral cable provided on said electric motor as well as for compensation of said electric current command value.

3. The control device as set forth in Claim 1, wherein:

assuming that a symbol "X" represents an electric current command value which is required to apply a predetermined drive electric current to said electric motor when said circuit board is at a predetermined temperature and that another symbol "Y" represents an electric current command value which is required to apply said predetermined drive electric current to said electric motor when said circuit board is at each of various temperatures, a compensation map is further provided for storing compensating values R each of which is calculated by the ratio of said X to said Y, in correspondence respectively to said various temperatures of said circuit board; and

said command value generating section reads out one of said compensating values R from said compensation map in dependence on said board temperature detected by said temperature sensor and uses the read-out one compensating value R to compensate said electric current command value output from said motor drive circuit.

4. The control device as set forth in Claim 2, wherein:

assuming that a symbol "X" represents an electric current command value which is required to apply a predetermined drive electric current to said electric motor when said circuit board is at a predetermined temperature and that another symbol "Y" represents an electric current command value which is required to apply said predetermined drive electric current to said electric motor when said circuit board is at each of various temperatures, a compensation map is further provided for storing compensating values R each of which is calculated by the ratio of said X to said Y, in correspondence respectively to said various temperatures of said circuit board; and

said command value generating section reads out one of said compensating values R from said compensation map in dependence on said board temperature detected by said temperature sensor and uses the read-out one compensating value R to compensate said electric current command value output from said motor drive circuit.

5. The control device as set forth in Claim 3, further comprising:

a memory means for storing some of numerous numbers of said compensating values R composing said compensation map; and

generation means for generating the entirety of said compensation map based on said some compensating values R stored in said memory means.

6. The control device as set forth in Claim 4, further comprising:

a memory means for storing some of numerous numbers of said compensating values R composing said compensation map; and

generation means for generating the entirety of said compensation map based on said some compensating values R stored in said memory means.

7. The control device as set forth in Claim 5, wherein said compensating values R stored in said memory means are obtained through actual measurement for the control device after the same was manufactured.

8. The control device as set forth in Claim 6, wherein said compensating values R stored in said memory means are obtained through actual measurement for the control device after the same was manufactured.